WE CLAIM AS OUR INVENTION:

1. A method for producing a printing form for rotogravure, comprising the steps of:

providing a surface of the printing form with a wear-resistant layer; and

providing cups in the surface.

2. The method according to claim 1 wherein the wear-resistant layer is provided on the printing form before a formation of the cups.

3. The method according to claim 1 wherein the wear-resistant layer comprises a hard material layer.

4. The method according to claim 1 wherein the wear-resistant layer is a layer made of a composite material.

5. The method according to claim 4 wherein the composite material is comprised of a mixture of a synthetic and particulate elements.

6. The method according to claim 5 wherein the particulate elements are formed from silica sand.

7. The method according to claim 1 wherein the wear-resistant layer comprises a metallic layer.

8. The method according to claim 7 wherein the metallic layer is comprised of chromium.

9. The method according to claim 1 wherein the layer is provided on the printing form by means of one of a PVD and a CVD method.

10. The method according to claim 7 wherein the metallic layer is galvanically provided on the printing form.

11. The method according to claim 1 wherein a thickness of the layer is selected such that the cups are only partially provided in the layer.

12. The method according to claim 1 wherein a thickness of the layer is selected so that the cups are completely provided in the layer.

13. The method according to claim 1 wherein the wear-resistant layer is between 20 to 50 µm thick.

14. The method according to claim 1 wherein a depth of the cups provided in the surface of the printing form is in a range between 15 and 35 µm.

15. The method according to claim 2 wherein the cups are provided in the wear-resistant layer via engraving.

16. The method according to claim 15 wherein the engraving occurs by means of a mechanical engraving unit.

17. The method according to claim 16 wherein the engraving occurs by means of laser light.

18. The method according to claim 17 wherein the cups are directly provided by means of laser light.

19. The method according to claim 2 wherein the cups are provided in the wear-resistant layer via etching.

20. The method according to claim 19 wherein before implementation of the etching event, one of a photoresist and a thermoresist is applied to the wear-resistant layer to form an etching mask.

21. The method according to claim 19 wherein the etching mask is illustrated by means of laser light.

22. The method according to claim 1 wherein a surface of the wear-resistant layer is designed rough with a predetermined degree of roughness.

23. The method according to claim 22 wherein the degree of roughness corresponds to that of microroughness.

24. The method according to claim 22 wherein the roughness is provided by at least one of polishing and grinding of the surface.

25. The method of claim 1 wherein the printing form is for heliorotogravure.

26. A printing form for rotogravure wherein a surface of the printing form comprises a wear-resistant layer.

27. The printing form according to claim 26 wherein the printing form is for heliorotogravure.

28. The printing form according to claim 26 wherein the wear-resistant layer comprises a hard material layer.

29. The printing form according to claim 26 wherein the wear-resistant layer is a layer made of a composite material.

30. The printing form according to claim 29 wherein the composite material is comprised of a mixture of a synthetic and particulate elements.

31. The printing form according to claim 30 wherein the particulate elements are formed from silica sand.

32. The printing form according to claim 26 wherein the wear-resistant layer comprises a metallic layer.

33. The printing form according to claim 32 wherein the metallic layer is comprised of chromium.

34. The printing form according to claim 26 wherein a thickness of the layer is selected such that the cups are only partially provided in the layer.

35. The printing form according to claim 26 wherein a thickness of the layer is selected so that the cups are completely provided in the layer.

36. The printing form according to claim 26 wherein the wear-resistant layer is between 20 to 50 μm thick.

37. The printing form according to claim 26 wherein a depth of the cups provided in the surface of the printing form is in a range between 15 and 35 μm.

38. The printing form according to claim 26 wherein the cups provided in the wear-resistant layer are engraved cups.

39. The printing form according to claim 26 wherein the cups provided in the wear-resistant layer are etched cups.

40. The printing form according to claim 26 wherein the cups are laser light engraved cups.

41. The printing form according to claim 26 wherein a surface of the wear-resistant layer is designed rough with a predetermined degree of roughness.

42. The printing form according to claim 41 wherein the degree of roughness corresponds to that of microroughness.

43. The printing form according to claim 41 wherein the roughness is provided by at least one of polishing and grinding of the surface.

44. A printing form for rotogravure, comprising:

a core;

a wear-resistant layer overlying core;

the wear-resistant layer having a Vickers hardness greater than 110 kp/mm^2; and

cups engraved in the wear-resistant layer.

45. A printing form according to claim 43 wherein the base layer is provided between the wear-resistant layer and the core.

46. The printing form according to claim 44 wherein the cups extend through the wear-resistant layer and partially into said base layer.

47. A printing form for rotogravure, comprising:

a core;

a wear-resistant layer overlying the core;

the wear-resistant layer having a hardness greater than a hardness of the core; and

cups engraved in the wear-resistant layer.

48. The form of claim 47 wherein a base layer is provided between the wear-resistant layer and the core and the wear-resistant layer has a hardness greater than a hardness of the base layer.